

On the Investigation of an Integral Manifold for a SOV/41-10-3-3/14
System of Non-Linear Equations With Variable Coefficients

where f is defined for $-\infty < t, g < \infty, |f(t, g, \varepsilon)| < D(\varepsilon) < \gamma^t$,
 $|f(t, g', \varepsilon) - f(t, g'', \varepsilon)| \leq \Delta(\varepsilon)|g' - g''|$ and $\Delta(\varepsilon) \rightarrow 0$,
 $D(\varepsilon) \rightarrow 0$ for $\varepsilon \rightarrow 0$. This integral manifold is stable, i.e.
every solution $h = h_t$ of (1) with the initial values from
 U_{g^*} tends to f , and it is $|h_t - f(t, g, \varepsilon)| \leq K(\varepsilon, D)e^{-\gamma(t - t_0)}$,
 $\gamma^* = \text{const} > 0$.
There are 2 Soviet references.

SUBMITTED: April 21, 1958 (Kiev)

Card 3/3

On the Investigation of an Integral Manifold for a SOV/41-10-3-3/14
System of Non-Linear Equations With Variable Coefficients

$g^1, g^n < \infty, h^1 \in U_g, h^n \in U_h, 0 < \varepsilon < \varepsilon_0$, it holds
 $|P(t, g^1, h^1, \varepsilon) - P(t, g^n, h^n, \varepsilon)| \leq \lambda(\varepsilon, g)\{|g^1 - g^n| + |h^1 - h^n|\}$,
 $|Q(t, g^1, h^1, \varepsilon) - Q(t, g^n, h^n, \varepsilon)| \leq \lambda(\varepsilon, g)\{|g^1 - g^n| + |h^1 - h^n|\}$,
 where $\lambda \rightarrow 0$ for $\varepsilon, g \rightarrow 0$. (4.) that $|H(t)| \leq N$, $|H(t^1) - H(t^n)| \leq \delta |t^1 - t^n|$, where the roots $p_i(t)$ ($i = 1, 2, \dots, n-1$) of
 $\text{Det} \|p E - H(t)\| = 0$ are so that it is $\text{Re}\{p_i(t)\} < -\gamma_1$,
 $\gamma_1 > 0$. Here it is

$$\delta \leq \frac{\gamma_1 T}{2a^2 T}, \quad a = \frac{2^{n-1} \lambda}{\gamma_1^{n-1}}, \quad \lambda = 2^{n-2} N^{n-1} \sqrt{(n-1)^{n-2}},$$

$$T = \frac{4}{\gamma_1} |\ln 2a|.$$

Theorem: Under these assumptions there always exist positive γ_1^* and ε^* so that (1) possesses a unique one-parameter integral manifold $h = f(t, g, \varepsilon)$ for every positive $\varepsilon < \varepsilon^*$,

AUTHOR: Mitropol'skiy, Iurii. SOV/41-10-3-5/14
 TITLE: On the Investigation of an Integral Manifold for a System of Non-Linear Equations With Variable Coefficients (Ob issledovanii integral'nogo mnogoobraziya dlya sistemy nelineynykh uravneniy s peremennymi koefitsiyentami)
 PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1958, Vol 10, Nr 3, pp 270 -279 (USSR)
 ABSTRACT: The author considers the system

$$(1) \frac{dh}{dt} = H(t)h + Q(t, g, h, \varepsilon), \quad \frac{dg}{dt} = \omega(t) + P(t, g, h, \varepsilon)$$

where h is an $(n-1)$ -dimensional vector, $H(t)$ a bounded $(n-1) \times (n-1)$ matrix and $\omega(t)$ a bounded function. It is assumed 1.) that the function P and the vector Q are defined in $-\infty < t < \infty$, $-\infty < g < \infty$, $h \in U_{g_0}$, $0 < \varepsilon < \varepsilon_0$, where U_{g_0} is a g_0 -neighborhood of $h = 0$, 2.) that in $-\infty < g < \infty$, $t < \infty$, $0 < \varepsilon < \varepsilon_0$ it holds $|P(t, g, 0, \varepsilon)| \leq M(\varepsilon)$, $|Q(t, g, 0, \varepsilon)| \leq M(\varepsilon)$ where $M(\varepsilon) \rightarrow 0$ for $\varepsilon \rightarrow 0$ 3.) that for $g < g_0$ and $-\infty < t$,

On the question of equations...

88860

S/044/60/000/007/014/058
C111/C222

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 2/2

88860

16.3400

S/044/60/000/007/014/058
C111/C222

AUTHOR: Mitropol'skiy, Yu.O.

TITLE: On the question of equations being little different from
closedly integrable equationsPERIODICAL: Referativnyy zhurnal. Matematika, no.7, 1960, 81.
Abstract no.7552. Visnyk Kyivs'k. un-tu, 1958, no.1. Ser.
astron., matem., tekhn. vyp.1, 97-100

TEXT: The author considers the equation

$$\frac{d^2x}{dt^2} + f(x) = \varepsilon F(x, \frac{dx}{dt}, \varepsilon), \quad (1)$$

where ε is a small positive parameter and F is an analytic function of x for sufficiently small ε . The "undisturbed" equation $\frac{d^2x}{dt^2} + f(x) = 0$ has

the periodic solution $x = z(\psi, a)$. The author proposes a method for the construction of an approximate solution of (1) which is analogous to the method of N.M.Krylov and N.N.Bogolyubov. The equation (1) is considered more detailed in another paper of the author (abstract 7551). ✓

Card 1/2

S/044/62/000/001/022/061
C111/C444

where the $F_n(T, \theta, x, \frac{dx}{dt})$ have the period 2π with respect to θ and are polynomials with respect to

$$\sin \theta, \cos \theta, x, \frac{dx}{dt}, \frac{d\theta}{dt} = V(T)$$

The application of asymptotic methods for the evaluation of the approximative solution of this equation leads to the investigation of the system

$$\frac{da_1}{dt} = \epsilon \Phi_{100}^{(0)}(T, a_1), \quad \frac{d\Psi_1}{dt} = \omega(T, a_1) + \epsilon \left\{ \Phi_{200}^{(0)}(T, a_1) + \omega_2^{(0)}(T, a_1) u_2 \right\}$$

Investigated is the order of the error which arises in the numerical integration of the equations (1) in the case of non-resonance as well as in the case of resonance.

[Abstracter's note: Complete translation.]

Card 2/2

34576

16.3400S/044/62/000/001/022/061
C111/C444

AUTHOR:

Mitropol'skiy, Yu. O.

TITLE:

The investigation of the order of errors in the asymptotic integration of equations which little differ from strictly integrable equations

PERIODICAL:

Referativnyy zhurnal, Matematika, no. 1, 1962, 38,
abstract 1B190. ("Visnyk Kyiv's'k. un-tu," 1958, no. 1,
ser. astron., matem. ta mekhan. vyp., 2, 3-6)

TEXT:

Considered is the differential equation

$$\frac{d^2x}{dt^2} + f(\tau, x) = \epsilon F(\tau, \theta, x, \frac{dx}{dt}, \epsilon)$$

ϵ be a small parameter, $\tau = \epsilon t$, $F(\tau, \theta, x, \frac{dx}{dt}, \epsilon)$ be an analytic function of ϵ , which for small ϵ allows the expansion

$$F(\tau, \theta, x, \frac{dx}{dt}, \epsilon) = \sum \epsilon^n F_n(\tau, \theta, x, \frac{dx}{dt}),$$

Card 1/2

X

Asymptotic Methods in Nonlinear Oscillation Theory 957

A.A. Vitt are mentioned in connection with the application of Lyapunov-Poincaré methods to systematic analysis of nonlinear oscillations, and N.N. Krylov, N.N.Bogolyubov and Yu. A. Mitropol'skiy in connection with the asymptotic methods presented in this book. In the preface to the second edition the authors thank graduate student O.B. Lykov for his help in preparing the manuscript. There are 49 references, of which 49 are Soviet (including 5 translations), 3 English, 3 French, 1 German and 1 Italian.

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Asymptotic Methods in Nonlinear Oscillation Theory 957

of relaxation type are studied and the large parameter method of A.A. Dorodnitsyn is presented. In Chapter III the authors investigate the effect of external periodic forces on oscillation systems. In Chapter IV single-frequency oscillations in systems with many degrees of freedom are analyzed and the method of slowly changing parameters, which now is extensively used in practice, is presented. In Chapter 5 the methods of averaging and their application to systems with many degrees of freedom are studied. Chapter 6 is intended for mathematicians interested in the theory of differential equations with small parameters. The foundations of asymptotic methods are considered and series of theorems on the existence and stability of periodic and almost-periodic solutions are established. In the introduction, Soviet personalities mentioned include A.M. Efros, A.M. Danilevskiy, N.M. Krylov, N.N. Bogolyubov and A.I. Lur'ye in connection with the development of symbolic methods of solution of differential equations. L.I. Mandel'shtam, N.D. Papaleksi, A.A. Andronov and

Cont'd - 2/7

PHASE I BOOK EXPLOITATION 957

Bogolyubov, Nikolay Nikolayevich and Mitropol'skiy, Yuriy
Alekseyevich

Asimptoticheskiye metody v teorii nelineynykh kolebaniy (Asymptotic
Methods in Nonlinear Oscillation Theory) 2d., rev. and enl.
Moscow, Fizmatgiz, 1958. 408 p. 7,000 copies printed.

Ed.: Zhabotinskiy, Ye. Ye.; Tech. Ed.: Kolesnikova, A.P.

PURPOSE: This book deals with the solution of problems of the theory
of nonlinear oscillations by approximate asymptotic methods, and
is intended for engineers and scientific workers.

COVERAGE: The book consists of an introduction and six chapters.
Chapter I deals with the natural oscillations in systems close
to linear with one degree of freedom. In Chapter II the basic
concepts of the phase plane and of free oscillations in systems

CRD-17

MITROPOLSKIY, Yu. A.

"Some Questions on the Asymptotic Integration of Non-Linear Differential Equations."
paper submitted at International Congress Mathematicians, Edinburgh, 14 -21 Aug
58.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, Yu.A. [Mitropol'skiy, Yu.O]

Nonstationary processes in some relaxation oscillating systems.
Nauk zap. Kyiv. un. 16 no.16:93-101 '57. (MIRA 13:3)
(Vibrations)

1.24-58-9-9504

On the Internal Resonance in Nonlinear Oscillatory Systems

$$\frac{d^2 \mathbf{q}}{dt^2} = q^2 A_1(\tau, \dot{\xi}, \eta, \dot{\xi}, \dot{\eta}) + q^3 A_2(\tau, \dot{\xi}, \eta, \dot{\xi}, \dot{\eta}) + \dots$$

$$\frac{d^2\eta}{dt^2} = Q^2 B_1(\tau, \xi, \eta, \dot{\xi}, \dot{\eta}) + Q^3 B_2(\tau, \xi, \eta, \dot{\xi}, \dot{\eta}) + \dots$$

In order to solve the problem, the functions u_1, u_2, \dots and the quantities $A_1, A_2, \dots, B_1, B_2, \dots$ must be found. By way of a supplementary condition the assumption is made that the functions u_1, u_2, \dots do not contain the first harmonic of the argument ωt . The method proposed by the author develops the idea of N. N. Bogolyubov's method, also the author's method for systems with slowly varying parameters. By way of an illustration of the method set forth, an example of the vibration of two inductively connected contours is presented, wherein the first contour has a nonlinear element with the characteristic $\sqrt{\varepsilon} f(x)$.

1. Mechanics--Theory 2. Oscillations--Mathematical analysis 3. Resonance--Mathematical analysis
4. Operators (Mathematics)--Applications S. N. Shimanov
5. Functions--Applications 6. Differential equations
--Applications
Card 3/3

124-58-9-9504

On the Internal Resonance in Nonlinear Oscillatory Systems

where $Q(\tau, p)$ for any value of τ on the segment $0 \leq \tau \leq L$ has a multiple imaginary root, i.e., it can be represented in the form

$$Q(\tau, p) = c(p^2 + \omega^2(\tau))^2$$

The function $y(t, \tau, \rho)$ is sought, where $\tau = \rho t$ and $\rho = \sqrt{\varepsilon}$, such that the expression $x(t) = [y(t, \tau, \rho)]$ for $\tau = \rho t$ satisfies equation (1). In lieu of equation (1) the equation

$$(p_c^2 + \omega^2(\tau))y = \rho^2 F(y, y', y'', y''', \tau)$$

$$p_c = p_t + Q p_\tau \quad (2)$$

is examined. The solution of the symbolic equation (2) is sought in the form of an asymptotic series

$$y = u_0(\xi, \eta, t) + \rho^2 u_1(\xi, \eta, t) + \rho^3 u_2(\xi, \eta, t) + \dots$$

in which ξ and η must be determined from the following system of equations
Card 2/3

124-58-9-9504

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 7 (USSR)

AUTHOR: Mitropol'skiy, Yu. A.

TITLE: On the Internal Resonance in Nonlinear Oscillatory Systems (K voprosu o vnutrennom rezonansse v nelineynykh kolebatel'nykh sistemakh)

PERIODICAL: Nauk. zap. Kyyivs'k. un-t, 1957, Vol 16, Nr 2, pp 53-61

ABSTRACT: Examination of the problem of the internal resonance in a nonlinear oscillatory system, the motion of which is described by the equation

$$Z(p)x = \epsilon F(\tau, x), \quad p = \frac{d}{dt}, \quad \tau = \epsilon t \quad (1)$$

where $F(\tau, x)$ is some functional, $Z(p)$ is an operator which can be represented as the sum

$$Z(p) = \sum_{n=1}^4 a_n(\tau) p^n = Q(\tau, p) + \epsilon P(\tau, p)$$

Card 1/3

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MITROPOLISKIY, Yu.A.; PARASYUK, O.S.

Fourth Congress of Rumanian Mathematicians. Ukr.mat.zhur. 9 no.1:
113 '57. (MLRA 10:5)
(Bucharest--Mathematics--Congresses)

SOV/124-57-4-3910

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 10 (USSR)

AUTHOR: Mitropol'skiy, Yu. A. (Kiev)

TITLE: Unsteady Processes in Nonlinear Oscillatory Systems (Nestatsionarnyye protsessy v nelineynykh kolebatel'nykh sistemakh)

PERIODICAL: Tr. 3-go Vses. matem. s"yezda. Vol I, Moscow, AN SSSR, 1956
p 224

ABSTRACT: Bibliographic entry

Card 1/1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, Yu.A.

Passage through resonance of the second kind. Ukr.mat.zhur. ? no.1:
121-123 '55. (Vibration) (MIR 8:?)

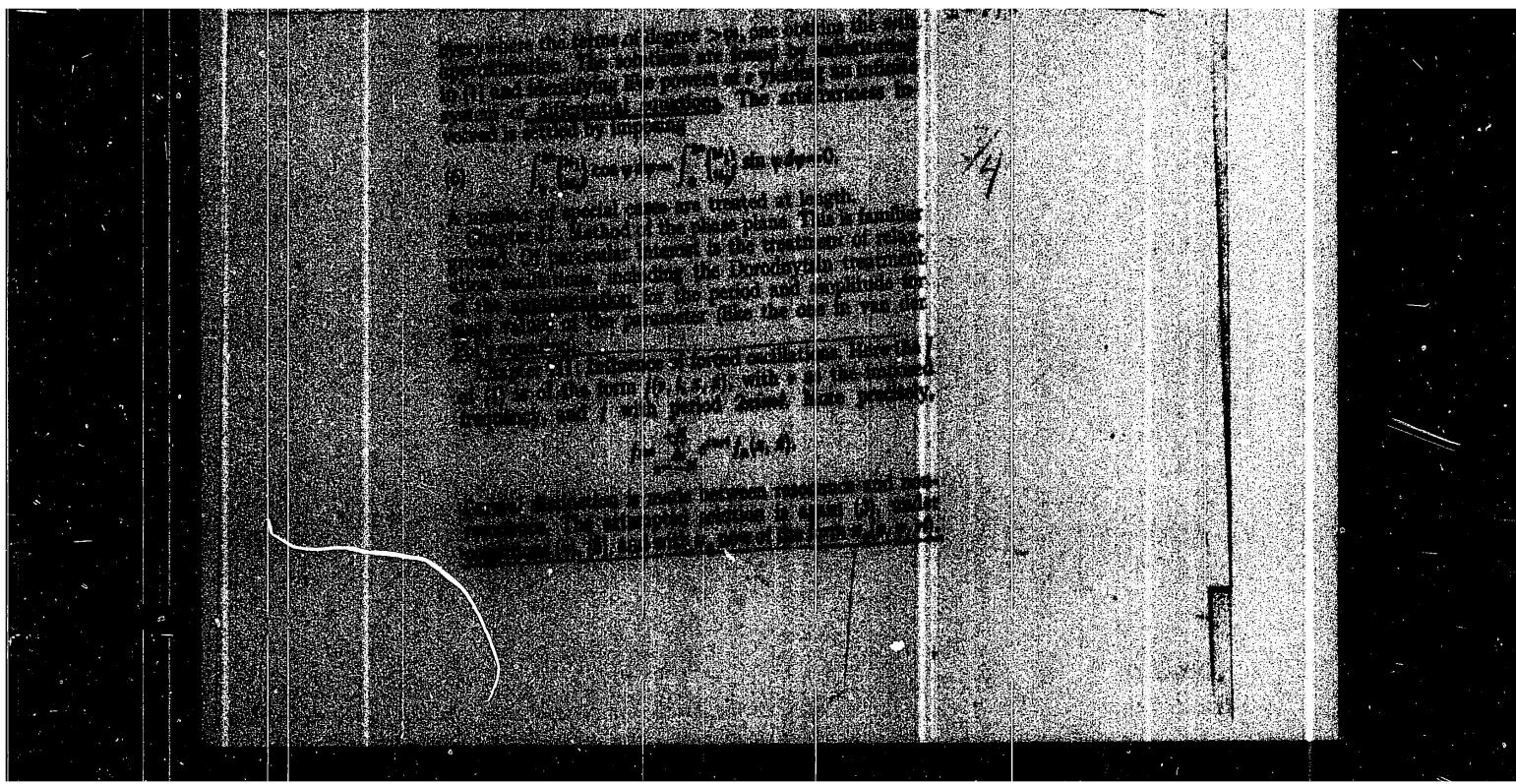
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...and to a lesser extent to the patient. The patient should be
treated with care and the treatment should be
done with care.

...the patient's condition of mind or body is considered
to be such that he is unable to care for himself
or his condition is such that he is unable to care for
himself. In this case, the patient should be
treated with care and the treatment should be
done with care.

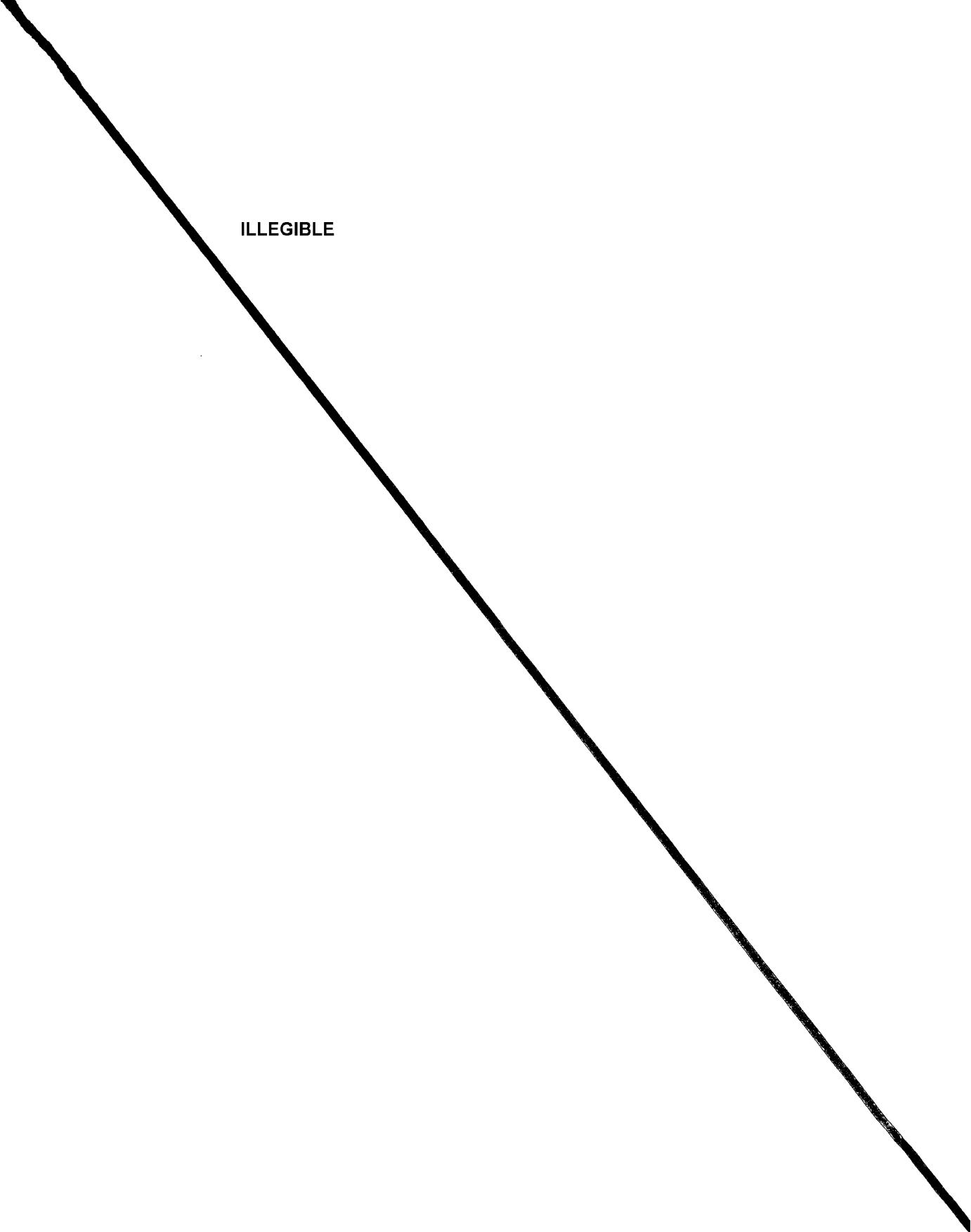
...the patient's condition of mind or body is considered
to be such that he is unable to care for himself
or his condition is such that he is unable to care for
himself. In this case, the patient should be
treated with care and the treatment should be
done with care.

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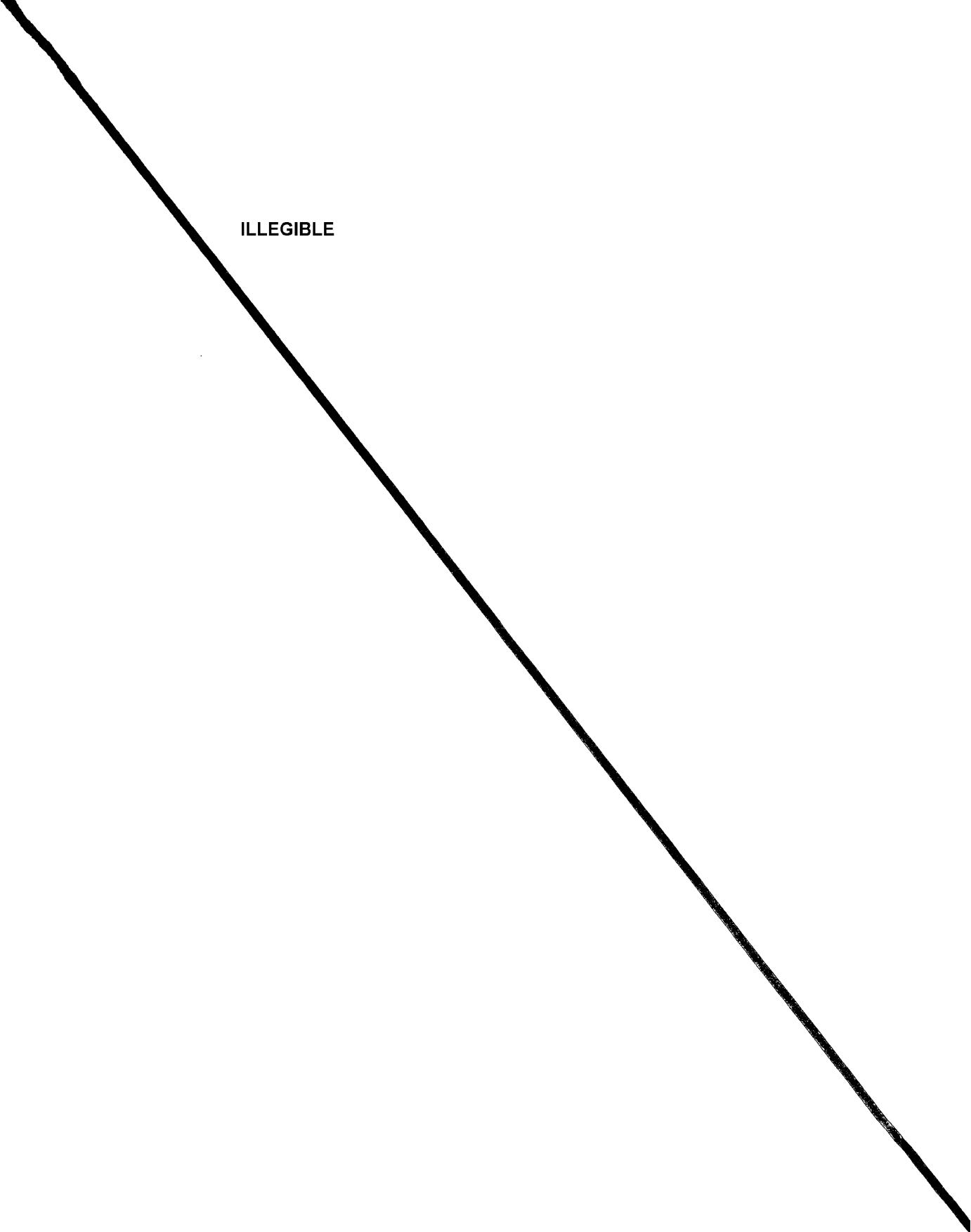
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ILLEGIBLE



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

ILLEGIBLE



Kiev: Publishing House of the Academy of Sciences, 283p. (1955) CARD 2/2 PG-#1

sidered. The case of gyroscopic terms (non-dissipative terms with \dot{q}) are investigated too. The calculations are carried out up to first and second approximation. The obtained defining equations are not explicitly integrable such that finally, in any case, numerical methods must be applied. The expenditure is said to be essentially smaller than for direct numerical solution of the starting equations. The establishment of the differential equations for the first and second approximation can be essentially simplified if an energetic interpretation of the method is used. Namely, the approximation equations can be directly obtained from expressions of energy without explicitly writing down the differential equations.

The author gives a lot of concrete problems among which the passing of an oscillator through a resonance point - which has been treated up to now for linear systems only - is investigated in detail for numerous non-linear cases. Sinusoidally fluctuating frequencies and simultaneous influence of several exciting frequencies are investigated too.

In a concluding chapter some theorems on the question of the asymptotic convergence of the solution series and on the stability of the stationary solutions are derived.

This important book is indispensable for everyone who works in the domain of non-linear oscillations.

MITROPOL'SKIY, Yu.A.

SUBJECT	USSR/MATHEMATICS/Differential equations	CARD 1/2	PG - 11
AUTHOR	MITROPOL'SKIY Ju.A.		
TITLE	Non-steady processes in non-linear oscillating systems.		
PERIODICAL	Book under editorship of N.N.Bogoljubov. Kiev: Publishing House of the Academy of Sciences of the Ukrainian SSR. 283 p. (1955) reviewed 5/1956		

The book published under editorship of N.N.Bogoljubov by one of his followers is dedicated to the representation of a method which is very generally applicable, by aid of which non-steady non-linear oscillation processes with timely slowly variable parameters can be calculated. Essentially the question is the application and elaboration of an asymptotic set up already given in 1937 by Krylov and Bogoljubov, where the desired solution is obtained as a power series of ϵ (a small factor standing before the non-linear perturbation term). Thus the integration of the mostly complicated starting equations is reduced to the integration of two differential equations for amplitude and phase of an undisturbed basic oscillation. The method is applied to systems of differential equations of second order which are obtained from the general Lagrange functions of q, \dot{q}, t and ϵ , where the influence of time is divided into periodic excitations of definite frequency ν and into "slow" variations of the other characteristic values (e.g. of the frequency too). Besides of systems, where linear equations of motion are remaining for $\epsilon = 0$, also adjacent systems of integrable, essentially non-linear systems are con-

Mitropol'skiy, Yu.O.

124-1957-10-11250

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 11 (USSR)

AUTHOR: Mitropol'skiy, Yu. O.

TITLE: Influence of Elastic Elements with Non-linear Characteristics
on the Small Vibrations in Some Gyroscopic Systems (O
vliyanii uprugikh elementov s nelineynoy kharakteristikoy na
malyye kolebaniya v nekotorykh giroskopicheskikh sistemakh)

PERIODICAL: Nauk. zap. Kyiv's'k. un-ta, 1954, Vol 13, Nr 8, pp 107-114

ABSTRACT: An equation is deduced for small vibrations in a flexible shaft
with a disk, in the presence of elastic elements having non-
linear characteristics. The Author states that in the presence
of non-linear terms a variety of resonance phenomena can be
obtained.

D. R. Merkin

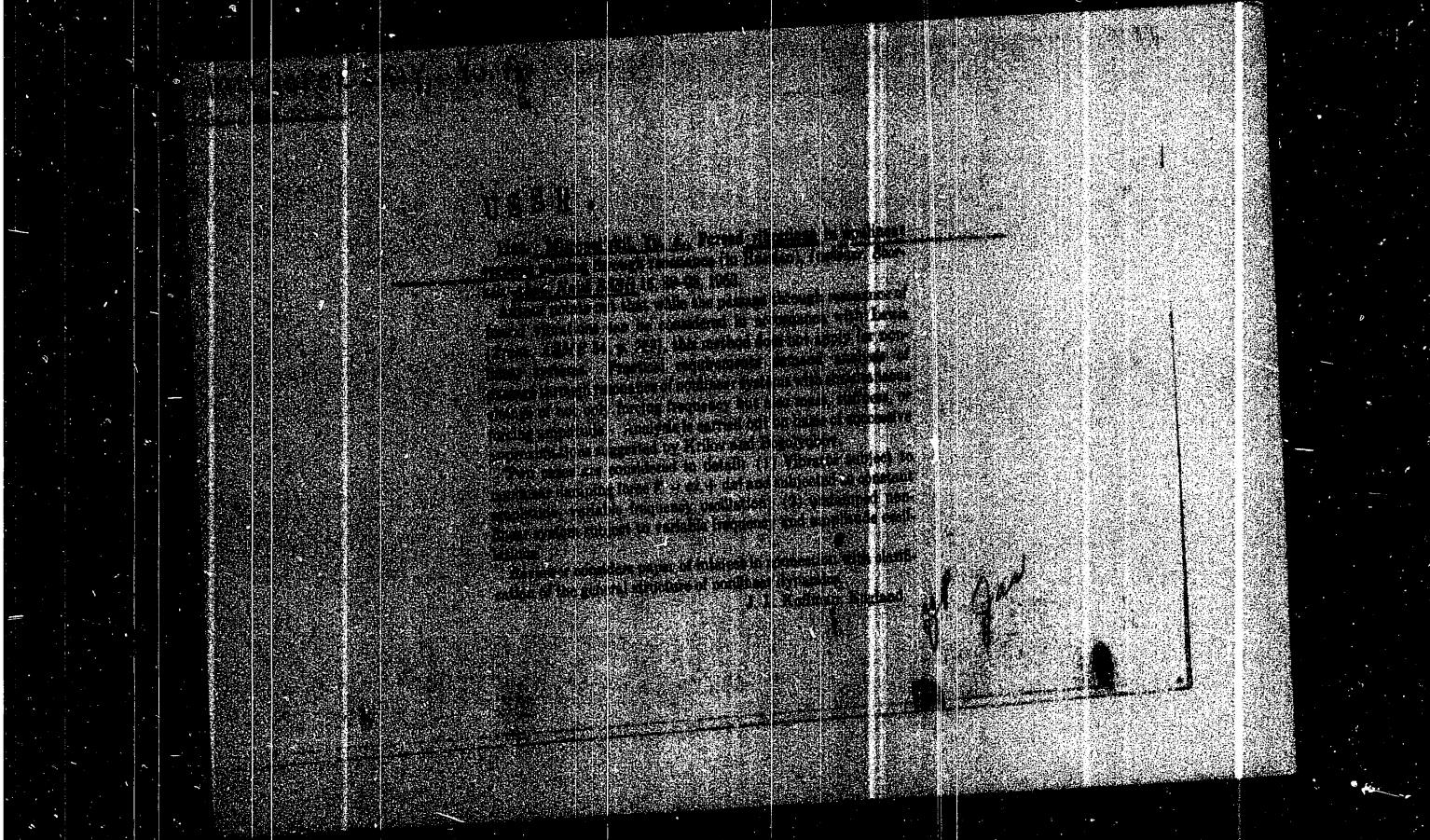
Card 1/1

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, Yu.A.

Nonstationary vibrations in systems with several degrees of freedom.
Ukr.mat.shur. 6 no.2:176-189 '54. (MIRA 8:5)
(Vibration)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOLSKIY, Yu. A.

"Application of the Method of Small Parameter to the Theory of Automatic Control," Reported at the Second All-Union Conference on Automatic Control Theory, Moscow, 1953

Sum in 1467

MITROPOL'SKIY, YU. A.

158T102

USER/Physics - Nonlinear Mechanics Mar/Apr 50
Mathematics - Applied

"Slow Processes in Nonlinear Oscillatory Systems
With Many Degrees of Freedom," Yu. A. Mitropol'
skiy, Kiev, 32 pp

"Priklad Matemat i Mekh" Vol XIV, No 2

Generalizes M. M. Bogolyubov's approximation
method for investigating single-frequency os-
cillation to the case of slowly varying para-
meters. Gives method for setting up approxi-
mate solution and "energy" method of obtaining
approximate solutions without preliminary es-
tablishment of precise differential equations
with examples of a nonlinear vibrator. Submitted
11 Feb 50.

158T102

MITROPOL'SKIY, YU. A.

2619) Svoistvennyye kolebaniya nelineynoy sistemy s medlenno menyayushchimisya parametrami. Sbornik trudov in-ta strait mekhaniki (Akad. Nauk Ukr. SSR), 11, 1949, s. 107-14

SO: LENTOPIS' NO. 35, 1949

MITROPOL'SKIY, YU. A.

26198 Issledovaniye sobstvennykh kolebaniy nelineynoy sistemy, vlyzkoj k
techno integriruyushcheyysya, pri naliichi medlenno menyayushchikhsya parametrov.
Sbornik trudov in-ta stroit. mekhaniki (Akad. Nauka Ukr. SSR), 11, 1949, s. 26-104

SO: LETOPIS' NO. 35, 1949

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, Yu.A.

Study of vibrations in nonlinear systems with several degrees of freedom and slowly changing parameters. Ukr.mat.zhur. [1] no.2:85-98 '49.
(MIR 7:10)

(Vibration) (Differential equations)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MORDUKHAY-BOLTOVSKOI, F.D.; MITROPOL'SKIY, V.I.

Benthos of Lake Beloye. Trudy Inst.biol.vodokhran. no.2:
85-101 '59. (MIRA 13:5)
(Beloye, Lake (Vologda Province)--Benthos)

MITROPOL'SKIY, O.V.

Observations on the flight of land birds in the North Atlantic.
Ornitologija no.5:330-332 '62. (MIRA 16:2)
(Atlantic Ocean--Birds--Migration)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIV, O.V.

Determining the age of birds from the length of ear feathers.
Ornitologija no.4:416-417 '62. (MIRA 16:4)
(Birds—Age) (Feathers)

IVLIYEV, V.G.; MITROPOL'SKIY, O.V.; TAZETDINOV, M.G.

Bird fauna in the region of reclaimed virgin lands (Pavlodar area
of the Irtysh Valley). Ornitologija no.3:298-301 '60.

(MIRA 14:6)

(Pavlodar Province—Birds)

MITROPOL'SKIY, Nikolay Mikhaylovich, [deceased], OVECHKIN, Aleksandr Mikhaylovich,
doktor tekhn. nauk, red.; ALESHINSKIY, Yuryi Nikolayevich, BOGDANOVICH,
Anton Fedorovich; PISHCHUKOV, M.A., kand. tekhn. nauk, red.;
KARAMYSHEV, I.A., inzh.; KHITROV, P.A., tekhn. red.

[Structural elements] Stroitel'nye konstruktsii. Moscow, Gos. transo.
zheleznodor. izd-vo, 1958. 576 p. (MIRA 11:11)
(Structures, Theory of)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K.

"Different Kinds of Local Suppurative and Inflammatory Diseases and Their Treatment," Med.

Sestra., No. 2, 1949.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROKHIN, N. V.

"Regulation of Stresses of Jointless Reinforced Concrete Arch Bridges ... in Account Continuous Processes." Izd. Nauk. Sci., Moscow Inst. of Engineers of Railroad Transport, Moscow, 1953. Dissertation (Inzhenernyy Zashchita--Tekhnika--Promst., No. 14)

SO: SUM 186, 19 Aug 1954

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K. (Kolemma)

"Hernias; their prevention and treatment" by Iu.M.Militarev.
Reviewed by N.K.Mitropol'skii. Med. sestra 22 no.5:63-64
My'63. (MIRA 16:8)
(HERNIA) (MILITAREV. Iu.M.)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna)

"Appendicitis" by S.N.Strakhov. Reviewed by N.K. Mitropol'skii.
Med. sestra 22,no.4: 62-63 Ap '63. (MIRA 16:7)
(APPENDICITIS)

MITROPOL'SKIY, N.K., zasluzhennyi vrach RSFSR (Kolomna)

Let's systematically raise the qualifications of nurses. Med.
sestra 21 no.9:60-62 S '62. (MIRA 15:9)
(NURSES AND NURSING)

MITROPOL'SKIY, N.K., zasluzhennyi vrach RSFSR (Kolomna)

Intravenous administration of medicinal substances. Med.sestra
21 no.8:36-41 Ag '62. (MIRA 15:9)
(INJECTIONS, INTRAVENOUS)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K. (Kolomna)

Nurses discuss their journal. Med.sestra 21 no.7:64 J1 '62.
(MIRA 15:8)
(NURSES AND NURSING--PERIODICALS)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna)

What literature should be discussed in advanced training
courses for nurses. Med. sestra 21 no.1:63-64 Ja '62.
(MIRA 15:3)

(NURSES AND NURSING)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna)

"Radiculitis, care and prevention" by B.S.Vilenskii. Reviewed
by N.K.Mitropol'skii. Med. sestra 20 no.3:60-62 Ag '61.

(MIRA 14:10)

(NERVES, SPINAL--INFLAMMATION) (VILENSKII, B.S.)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR

Work of city conferences on research and practice of subprofessional
medical personnel in Kolomna, Med. sestra 20 no.6:59 Je '61.

(MIRA 14:7)

(KOLOMNA--MEDICINE)

MITROPOL'SKIY, N.K. (Kolomna)

What one must know about tumors. Med. sestra 19 no.12:33-36 D '60.
(MIRA 13:12)

(CANCER)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKII, N.K. (Kolomna)

"Urological diseases and their treatment at health resorts" by
S.A.Mirov. Reviewed by N.K.Mitropol'skii. Med. sestra 19 no.12:
(URINARY ORGANS--DISEASES)
(MIROV, S.A.)

MITROPOL'SKIY, N.K., nasluzhennyj vrach RSFSR (Kolomna)

Senior surgical nurse, Med.sestra 19 no. 8:42-43 Ag '60,

(MIRA 13:7)

(MALIKOVA, MARILA KUPRIIANOVNA)

MITROPOL'SKII, N.K. (Kolomna)

Subprofessional medical personnel improve their skills. Med. sestra
19 no.6:47-48 Je '60. (MIRA 14:1)
(KEMEROVO-MEDICINE-STUDY AND TEACHING)

MITROPOL'SKIY, N.K. (Kolomna Moskovskoy oblasti)

"Glands of internal secretion" by V.M. Kogan-Iashnyi, E.P. Levina.
Reviewed by N.K. Mitropol'skii. Med.sestra 19 no.2:43 F '60.
(MIRA 13:5)
(ENDOCRINE GLANDS) (KOGAN-IASHNYI, V.M.) (LEVINA, E.P.)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K. (Lolonna Moskovskoy oblasti)

"Endemic goiter" by V.V. Khvorov. Reviewed by N.K. Mitropol'skii.
Med.sestra 19 no.2:43 F '60. (MIRA 13:5)
(GOITER) (KHVOROV, V.V.)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna)

Myositis ossificans of both hips. Kaz.med.zhur. no.5:71 8-0 '60.
(MIRA 13:11)

(MUSCLES)
(HIP JOINT--DISEASES)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna, Moskovskoy oblasti,
ul.Komsomol'skaya, d.28, kv.16)

Cholelithic ileus. Nov. khir. arkh. no.1:113-114 Ja-F '60.

(MIRA 15:2)

1. Khirurgicheskoye otdeleniye (zav. - F.S.Krasnov) Kolomenskoy
gorodskoy bol'nitsy.

(INTESTINAL OBSTRUCTIONS) (CALCULI, BILIARY)

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pic EXCERPTA MEDICA Sec 9/Vol 13/5 SURGERY May 59

X, 19)

2318. (745) DEVELOPMENT OF AN ACUTE DUODENAL ULCER AS A RESULT
OF A BURN OF THE ABDOMINAL WALL (Russian text) - Mitropolsky

N.K. - KHIRURGIYA 1958, 15 (108-110) Illus. 1

In severe burns, especially in burns of the abdominal wall, haemorrhages and ulceration may appear in the gastrointestinal tract, especially the duodenum. These ulcers are due to reflex interrelationship of the skin of the abdominal wall with the duodenal and gastric mucosa. Destructive processes which take place on the skin of the abdominal wall may cause analogous changes of duodenal and gastric mucous membrane. A case is reported of a girl aged 5 who was admitted with 3rd degree burns and died after 6 days. At postmortem an oval ulcer with a gaping blood vessel was found on the posterior wall of the duodenum.

MITROPOL'SKIY, N.K., zasluzhennyi vrach RSFSR (Kolomna)

"How to manage cases of peroral and subcutaneous poisoning".
Med.sestra 17 no.5:47 My'58
(POISONS) (MIRA 11:6)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIV, N.K., zasluzhennyj vrach RSFSR (Kolomna)

Work of municipal conferences of subordinate medical personnel in
Kolomna in 1957. Med.sestra 17 no.5:44 My'58 (MIRA 11:6)
(KOLOMNA--MEDICINE)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N.K. (Kolomna)

"Medical techniques" by S.S.Pozdniakov. Reviewed by N.K.Mitropol'skii. Med.sestra 17 no.2:39-40 F '58. (MIRA 11:3)
(MEDICINE--PRACTICE)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR (Kolomna)

First All-Russian Conference of Surgeons, Med.mestra 15 no.12;
10-13 D 1956. (MIRA 10:1)
(APPENDICITIS) (VEINS--DISEASES)

MITROPOL'SKIY, N.K., zasluzhennyy vrach RSFSR (Kolomna, Moskovskaya oblast')

Organization and methods of instruction and laboratory work in
surgery in a medical school. Med. sestra 15 no.11:18-21 N '56.
(SURGERY--STUDY AND TEACHING) (MLRA 9:12)

MITROPOL'SKIY, N.K.,(Kolomna Moskovskoy oblasti)

Educational work with ward attendants to increase their professional qualifications. Med. sestra no.11:19-21 N '55.

(MLRA 9:3)

1. Zasluzhennyy vrach RSFSR.
(MEDICAL SERVICE EMPLOYEES--EDUCATION AND TRAINING)

MITROPOL'SKIY, N.K., zasluzhennyj vrach RSFSR, (Kolomna Moskovskoy oblasti)

Teaching surgery in the feldsher department of a medical school.
Fel'd. i akush. no.11:50-53 N '54. (MLRA 7:12)
(SURGERY, education
in Russia, feldshers in med. schools)

MITROPOL'SKIY, N. K.

Appendicitis

Acute appendicitis and its therapy. Med. sestra No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, N. R.

Tuberculosis

Surgical treatment of pulmonary tuberculosis in the district. Probl.tub. No. 4,
1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

MITROPOL'SKIY, N.K.

Harmfulness of smoking. Med. sestra, Moskva No.2:21-23 Feb 52.
(CIML 21:4)

1. Honored Physician RSFSR.

MITROPOL'SKIY, N. K.

Tobacco - Physiological Effect

Harmfulness of smoking. Med. sestra no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

Mitropol'skiy, N. K.

MITROPOL'SKII N. K.

A vopros o povyshenii kvalifikatsii srednikh meditsinskikh rabotnikov.
Raising of qualifications of medical assistants, Med. sestra,
Resolyva No. 11 Nov 50 p. 30-1.

1. Honored Physician RASFSR.
GLA Vol. 20, No. 2 Feb 1951.

MITROPOL'SKIY, N.K.

PA 16/49T88

USER/Medicine - Nurses and Nursing Aug 48
Medicine - Societies, Medicine

"Scientific Practical Conference of Middle Medical
Workers at Kolomna," N. Mitropol'skiy, 1 p

"Med Sestra" No 8

Summarizes a few speeches made by doctors and
nurses at conference. Describes case of $2\frac{1}{2}$ year old
boy who fell from fourth story window without in-
jury.

16/49T88

RYSKIN, Ya.I.; STAVITSKAYA, G.P.; MITROPOL'SKIY, N.A.

Infrared spectrum and structure of sodium hydrosilicate
Na₂O · SiO₂ · 6H₂O. Izv. AN SSSR. Ser.khim. no.3:416-421 Mr
'64. (MIRA 17:4)

1. Institut khimii silikatov im. I.V.Grebenshchikova AN SSSR.

MITROPOL'SKIY, N.

STRUCTURES

"Historical development of the theories of building."

Dissertation for Doctor of Technical Sciences, Moscow Inst. of Railroad Transport
Engineering (MIIZhT)

Subject: Hydroengineering building and construction

Gidrotekhnicheskoye, stroitel'stvo, 12, 1946.

MITROPOL'SKIY, Nikolay Mikhaylovich, prof., doktor tekhn. nauk, [deceased],;
MITROPOL'SKIY, M.N., kand. tekhn. nauk.; YEGOROVA, N.O., red.;
GALAKTIONOVA, Ye.N., tekhn. red.

[Planning methods in bridge construction; historical development]
Metodologiya proektirovaniia mostov; istoricheskoe razvitiye.
Moskva, Nauchno-tekhn. izd-vo avtotransp.lit-ry, 1958. 291 p.

(MIRA 11:12)

(Bridges)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, M.N., kandidat tekhnicheskikh nauk.

Regulating stresses in jointless arched reinforced concrete
bridges allowing for elongation processes. Trudy NIIT no.
85/86:127-155 '56. (MLRA 9:10)

(Bridges, Concrete) (Strains and stresses)

MITROPOLITSKY M.

Institute of Combined Transportation at the Academy of Sciences,
U.S.S.R. Avt.transp. 37 no.1:54 Ja '59. (MIRA 12:2)

1. Uchenyy sekretar' instituta kompleksnykh transportnykh problem
AN SSSR.
(Transportation--Research)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKII, M.

Economic problems of a unified transportation system in
the U.S.S.R. Vop.ekon. no.11:159-160 II '59. (MIRA 12:12)
(Transportation)

MITROPOL'SKIY, M.

Work of the Institute of Transportation Research of the Academy
of Sciences of the U.S.S.R. regarding the economic aspects of
transportation. Vop.ekon. no.5:139-141 My '57. (MLRA 10:7)
(Transportation)

MITROFOL'SKIY, I. S.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 737-X

BOOK

Call No.: AF389154

Authors: KARGIN, S. I., PETUNOV, S. P., and MITROFOL'SKIY, I. S.

Full Title: PRODUCTION OF NITRIC ACID

Transliterated Title: Proizvodstvo azotnoy kislotoy

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of
Chemical Literature (Goskhimizdat)

Date: 1949 No. pp.: 335 No. of copies: 5,000

Editorial Staff: Thanks are expressed to V.P. Markov, Kand. of Chem.
Sci., for valuable remarks.

PURPOSE AND EVALUATION: This book is intended as a manual for the course
in nitrogen fixation in chemical technical schools. It may also be
useful to engineers working in the nitrogen industry and allied fields.
This book may interest American chemists because no monograph on the
production of nitric acid has been published in English since the early
thirties. This clearly-written book contains much useful information.
It is based exclusively on the work of Soviet scientists, in particular
on the 1949 monograph Tekhnologiya azotnoy kislotoy (Technology of
Nitric Acid) by V. I. Atroshchenko and S. I. Kargin (See: AID 667-X).

NOTE: See card for KARGIN, S. I. for pages 2-10 of the abstract.

METROPOL'SKIY, B.I.; PIYATSKIY, V.M.; TRACHEV, R.V.

Die casting is an important potential for the manufacture of textile machinery. Izv. vys. ucheb. zav., tekhn. tekhn. (1964), no.4:151-155 (64).

1. Leningradskiy institut tekstil'noy i rukhoy promstsv. im. S.M. Kirova.

MITROPOL'SKIY, B.I.

Concerning A.I.Grishin's article "Investigating the performance of
the picking mechanism of the loom at high speeds. Izd.vys.ucheb.
zav.; tekhn.tekst.prom. no.3:158 '63. (MIRA 16:9)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kireva.
(Looms)
(A.I.Grishin)

MITROPOL'SKIY, B.I.

Energy operating conditions of the picking mechanism of the AT-100-2
loom. Izv. vys.ucheb.zav.; tekhn.tekst.prom. no.6:127-129 '61.
(MIRA 15:1)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kirova.
(Looms--Testing)

MITROPOL'SKIY, B. I.

Doc Tec Sci, Diss -- "Fundamentals in designing the spatial cam pair of beating mechanisms and experimental investigations of cross-thread feed mechanisms in automatic single-shuttle weaving machines". Moscow, 1961. 18 pp with drawings, 22 cm (Min of Higher and Inter Spec Educ RSFSR. Moscow Textile Inst), 200 copies, Not for sale, 10 works by the author listed at end of text (KL, No 9, 1961, p 180, No 24320). [61-53035]

MALYSHEV, Aleksandr Petrovich, prof., doktor tekhn.nauk; VOROB'YEV,
Pavel Aleksandrovich, kand. tekhn.nauk; DOBROGORSKIY, S.O.,
prof., doktor tekhn.nauk, rossenent; MITROPOL'SKIY, B.I.,
dots., kand.tekhn.nauk, rossenent; DITRATIY, A.V., kand.tekhn.
nauk, red.; KH'KIND, V.D., tekhn.red.; OCHERNOVA, Z.I., tekhn.
red.

[Mechanics and design calculations of looms] Mekhanika i kon-
struktivnye raschety tkatskikh stankov. Moskva, Gos.nauchno-
tekhn. izd-vo mashinostroit. lit-ry, 1960. 552 p.

(MIRA 14:5)
(Looms)

MITROPOL'SKIY, B.I.

Analysis of the shuttle race process on AT-102 and AT-105 looms.
Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.4:141-150 '58.
(MIRA 11:11)

1. Leningradskiy tekstil'nyy institut imeni Kirova.
(Looms)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, B. I., Docent Cand. Tech. Sci.

Dissertation: "Mechanisms of a Loom." Moscow Textile Inst, 2 Oct 47.

SO: Vechernaya Moskva, Oct, 1947 (Project #17836)

MITROPOL'SKIY, B.A.

Coagulating and anticoagulating systems in ischemic insultus patients. Zhur. nevr. i psikh. 65 no.1:32-36 '65.

(MIRA 18:2)

1. Kafedra nervnykh bolezney (zaveduyushchiy - prof. E.I. Yeselevich) i kafedra biokhimii (zaveduyushchiy - K.V. Slobodkina) Orenburgskogo meditsinskogo instituta.

MITROPOL'SKIY, B.A.

Thrombotest as an index of blood coagulation in disorders of
cerebral blood circulation. Zhur nevr. i psich. 64 no.10;
1470-1473 '64. (MIRA 17:11)

1. Klinika nervnykh bolezney (zaveduyushchiy - prof. E.I.
Yeselevich) Orenburgskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

MITROPOL'SKIY, B.A. (Orenburg)

Poisoning with proserine. Vrach.delo no.1:140-141 Ja '63.
(MIRA 1682)
(NEOSTIGMINE—TOXICOLOGY)

AKULOV, L.S.; ACHIL'DIYEV, U.I.; VOLOSOV, G.D.; GORDON, L.I.; GRIN, G.V.;
GROMOV, M.A.; KIRILLOV, A.Ya.; LIFSHITS, N.I.; MITROPOL'SKIY, A.V.;
RAYSKIY, I.D.; SMIRNOV, V.B.; FAYVUSOVICH, A.Kh.; FEDOROVA, I.Yu.;
TSIPIN, I.M.; CHEKHOVICH, D.I.; ISHKOVA, A.I., red.; KISELEVA, A.A., tekhn.red.

[Handbook on equipment for commercial enterprises and public food service] Spravochnik po oborudovaniyu dlja predpriatii torgovli i
obshchestvennogo pitanija. Izd.2., dop. Moskva, Gos. izd-vo torg.
lit-ry, 1960. 333 p.

(MIRA 14:10)

(Restaurants, lunchrooms, etc.,--Equipment and supplies)

MITROPOL'SKIY, A.S., kand. geol.-miner. nauk, otd. red.;
ZAITSEVA, I.P., red.

[Geology and geochemistry of ore deposits in Siberia]
Geologiya i geokhimija rudnykh mestorozhdenii Sibiri.
Novosibirsk, Nauka, 1965. 252 p. (MIRA 18:12)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye.

AKULOV, L.S.; ACHIL'DIYEV, U.I.; VOLOSOV, G.D.; GORDON, L.I.; GRIN, G.V.;
GROMOV, M.A.; KIRILLOV, A.Ya.; LIFSHITS, N.I.; MITROPOL'SKIY, A.V.;
RATSKIY, I.D.; SMIENOV, V.B.; FAYVUSOVICH, A.Kh.; FEDOROVA, I.Yu.;
TSIPIN, I.M.; CHEKHOVICH, D.I.; ISHKHOVA, A.K., red.; SUDAK, D.M.,
tekhn.red.

[Handbook on equipment for commercial enterprises and public food
service] Spravochnik po oborudovaniyu dlia predpriatii torgovli
i obshchestvennogo pitanija. Moskva, Gos.izd-vo torg.lit-ry,
1959. 322 p. (MIRA 12:12)

1. Inzhenerno-tehnicheskiye rabotniki Upravleniya torgovogo
oborudovaniya i Tsentral'nogo konstruktorskogo byuro torgovogo
mashinostroyeniya (for all except Ishkova, Sudak).
(Business enterprises--Equipment and supplies)
(Restaurants, lunchrooms, etc.--Equipment and supplies)

KOVALENKO, Ya.R.; FOMINA, A.Ya.; FEOKTISTOV, P.N. [deceased]; AKULOV,
A.V.; MITROPOL'SKIY, A.S.; SHUBIN, V.A.

Observations on the course of the chronic respiratory disease in
chickens. Veterinariia 37 no.12:34-42 D '60. (MIRA 15:4)
(Poultry--Diseases and pests) (Respiratory organs--Diseases)
(*Mycoplasma gallinarum*)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001134700010-6

GRIGOR'YEVA, T.N.; KOVALEVA, I.T.; MITYOPOL'SKIY, A.S.

Gorizontulite from Tuva. [Trudy] Inst. geol. i geofiz. Sib. otd.
AN SSSR no.32:56-60 1965. (MIRA 3830)

MITROPOL'SKIY, A.S.

Metamorphism of rocks and the conditions governing the formation
of alkali metasomatites in the Uymen' Depression of the Gornyy
Altai. Geol. i geofiz. no.1:92-105 '65. (MIRA 18;6)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

MITROPOL'SKIY, A.S.; ANISHCHENKO, A.M.

Newest tectonic movements in the Eastern Sayan Mountains.
Geol. i geofiz. no.12&112-116 '64. (MIRA 13-6)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN
SSSR, Novosibirsk.

MITROPOL'SKIY, A.S.

Ancient zones of oxidation of carbonate ore deposits in western
Tuva. Geol.i geofiz. no.1:64-77 '62. (MIRA 15:4)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.
(Tannu-Ola Range--Carbonates) (Oxidation)

Mitropol'skiy A.S.

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**International Symposium on
Microbiology and Immunology** (Proceedings).
Chiba University, Chiba, Japan, October 1-3, 1961.
Organized by the International Academy of Allergy, Immunology and Clinical Medicine,
Chairman: Tatsuo Goto, Director of the Allergy Section, National Institute of Allergy and
Infectious Diseases, Bethesda, Maryland, U.S.A.; Vice-Chairman: S. Sato, Department of
Immunology, Kyoto University, Kyoto, Japan; Secretary: T. Ogata, 270-2, Sakuragaoka,
Chiba-ku, Chiba-shi, Japan; Treasurer: K. Matsuda, 2-1, Nishiohno-cho, Chiba-ku, Chiba-shi,
Japan. Printed in Japan.

3/9

MITROPOL'SKIY, A.N., kand. med. nauk; YERYKALOVA, O.K.; ANDREYEV, M.F.,
dotsent (Leningrad)

Duration of the incubation period in visceral leishmaniasis.
Klin. med. 41 no.2:126-128 F*63 (MIRA 17:3)

1. Iz kafedry fakul'tetskoy terapii (nachal'nik - prof. V.A. Beyyer) i kafedry infektsionnykh bolezney (nachal'nik - prof. P.A. Alisov) Voyenno-meditsinskoy ordena Lenina akademii S.M. Kirova.

MITROPOL'SKIY, A.N., mayor meditsinskoy sluzhby, kand.med.nauk

Use of novocaine in patients with atherosclerotic cardiosclerosis.
Voen.-med. zhur. no.11:73 N '61, (MIRA 15:6)
(NOVOCAINE)
(HEART—DISEASES)

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GEYRO, S.B.; MITROPOL'SKIY, A.N.

Clinical picture of Brill-Symmers disease (giant follicular lymphoma).
Probl. gemat.i perel. krovi 6 no.1:36-43 '61. (MIRA 14:2)
(TUMORS)